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10/706,352

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Dumont M. Jones

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MUELLER AND SMITH, LPA
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EXAMINER

LOVEL, KIMBERLY M

ART UNIT

PAPER NUMBER

2167

DATE MAILED: 11/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/706,352

Applicant(s)

JONES ET AL.

Examiner

Kimberly Lovel

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This communication is responsive to the Amendment filed 21 August 2006.
2. Claims 1-24 are pending in this application. Claims 1, 13 and 22 are independent. In the Amendment filed 21 August 2006, claims 4, 8, 13 and 22-24 have been amended. This action is made Non-Final.
3. The rejections of Claims 1-21 as being unpatentable over US PGPub 2003/0135513 to Quinn et al (hereafter Quinn et al) in view of US PGPub 2005/0086238 to Nevin, III and of claims 22-24 as being unpatentable over US PGPub 2004/0078366 to Crooks et al in view of US PGPub 2005/0086238 to Nevin, III have been withdrawn as necessitated by applicants' arguments.

Affidavits

Declaration under 37 C.F.R. § 1.132

4. Applicant's arguments with respect to the declaration have been considered but are moot in view of the new ground(s) of rejection.

Declaration under 37 C.F.R. § 1.131

1. The affidavit filed on 5 April 2005 under 37 CFR § 1.131 has been considered but is ineffective to overcome the Nevin reference (US PGPub 2003/0135513).

Formal Requirements of a Declaration

2. From MPEP § 715.04[R-2]:

The following parties may make an affidavit or declaration under 37 CFR § 1.131:

(A) All the inventors of the subject matter claimed.

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(B) An affidavit or declaration by less than all named inventors of an application is accepted where it is shown that less than all named inventors of an application invented the subject matter of the claim or claims under rejection. For example, one of two joint inventors is accepted where it is shown that one of the joint inventors is the sole inventor of the claim or claims under rejection.

(C) **> If a petition under 37 CFR § 1.47 was granted or the application was accepted under 37 CFR § 1.42 or 1.43, the affidavit or declaration may be signed by the 37 CFR § 1.47 applicant or the legal representative, where appropriate.< .

(D) The assignee or other party in interest when it is not possible to produce the affidavit or declaration of the inventor. *Ex parte Foster*, 1903 C.D. 213, 105 O.G. 261 (Comm'r Pat. 1903).

Affidavits or declarations to overcome a rejection of a claim or claims must be made by the inventor or inventors of the subject matter of the rejected claim(s), a party qualified under 37 CFR §§ 1.42, 1.43, or 1.47, or the assignee or other party in interest when it is not possible to produce the affidavit or declaration of the inventor(s). Thus, where all of the named inventors of a pending application are not inventors of every claim of the application, any affidavit under 37 CFR § 1.131 could be signed by only the inventor(s) of the subject matter of the rejected claims. Further, where it is shown that a joint inventor is deceased, refuses to sign, or is otherwise unavailable, the signatures of the remaining joint inventors are sufficient. However, the affidavit or declaration, even though signed by fewer than all the joint inventors, must show completion of the invention by all of the joint inventors of the subject matter of the claim(s) under rejection. *In re Carlson*, 79 F.2d 900, 27 USPQ 400 (CCPA 1935).

An affidavit is a statement in writing made under oath before a notary public, magistrate, or officer authorized to administer oaths. See MPEP § 604 through § 604.06 for additional information regarding formal requirements of affidavits. 37 CFR § 1.68 permits a declaration to be used instead of an affidavit. The declaration must include an acknowledgment by the declarant that willful false statements and the like are punishable by fine or imprisonment, or both (18 U.S.C. § 1001) and may jeopardize

the validity of the application or any patent issuing thereon. The declarant must set forth in the body of the declaration that all statements made of the declarant's own knowledge are true and that all statements made on information and belief are believed to be true.

3. From MPEP 602 (II):

U.S. Patent and Trademark Office personnel are authorized to accept a statutory declaration under 28 U.S.C. § 1746 filed in the U.S. Patent and Trademark Office in lieu of an "oath" or declaration under 35 U.S.C. § 25 and 37 CFR § 1.68, provided that the statutory declaration otherwise complies with the requirements of law. Section 1746 of Title 28 of the United States Code provides:

Whenever, under any law of the United States or under any rule, regulation, order, or requirement made pursuant to law, any matter is required to be supported, evidenced, established, or proved by sworn declaration, verification, certificate, statement, oath or affidavit, in writing of the person making the same (other than a deposition, or an oath of office, or an oath required to be taken before a specified official other than notary public), such matter may, with like force and effect, be supported, evidenced, established, or proved by the unsworn declaration, certificate, verification, or statement, in writing of such person which is subscribed by him, as true under penalty of perjury, and dated, in substantially the following form:

[1] If executed without the United States:

"I declare (or certify, verify, or state) under penalty of perjury under the laws of the United States of America that the foregoing is true and correct. Executed on (date).

(Signature)."

[2] If executed within the United States its territories, possessions, or commonwealths:

"I declare (or certify, verify, or state) under penalty of perjury that the foregoing is true and correct. Executed on (date).

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(Signature)."

4. The submitted declaration fulfills all of the formal requirements for submission of a declaration under 37 C.F.R. §1.131. The examiner will now consider the merits of the declarations.

Allegation of FACTS

5. MPEP § 715.07 (I) states, *inter alia*,

The essential thing to be shown under 37 CFR § 1.131 is priority of invention and this may be done by any satisfactory evidence of the fact. FACTS, not conclusions, must be alleged. Evidence in the form of exhibits may accompany the affidavit or declaration. Each exhibit relied upon should be specifically referred to in the affidavit or declaration, in terms of what it is relied upon to show.

A general allegation that the invention was completed prior to the date of the reference is not sufficient. *Ex parte Saunders*, 1883 C.D. 23, 23 O.G. 1224 (Comm'r Pat. 1883). Similarly, a declaration by the inventor to the effect that his or her invention was conceived or reduced to practice prior to the reference date, without a statement of facts demonstrating the correctness of this conclusion, is insufficient to satisfy 37 CFR § 1.131.

The affidavit or declaration and exhibits must clearly explain which facts or data applicant is relying on to show completion of his or her invention prior to the particular date. Vague and general statements in broad terms about what the exhibits describe along with a general assertion that the exhibits describe a reduction to practice "amounts essentially to mere pleading, unsupported by proof or a showing of facts" and, thus, does not satisfy the requirements of 37 CFR § 1.131(b). *In re Borkowski*, 505 F.2d 713, 184 USPQ 29 (CCPA 1974). Applicant must give a clear explanation of the exhibits pointing out exactly what facts are established and relied on by applicant. 505 F.2d at 718-19, 184 USPQ at 33. See also *In re Harry*, 333 F.2d 920, 142 USPQ 164 (CCPA 1964) (Affidavit "asserts that facts exist but does not tell what they are or when the occurred.").

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6. In the case of the instant declarations, the Applicants have alleged conclusions, not facts as is required under 37 C.F.R. § 1.131.

The declarations allege that the claimed invention was reduced to practice on or before 2001, a conclusion that has yet to be drawn based upon the submitted evidence.

A proper declaration is required to allege FACTS, which are fully supported by evidence.

The evidence submitted in support of the Applicants' declarations includes Exhibit 4, which is portions of the current Iron Mountain Website. The declaration states that "The company has utilized continuous backups on a business daily basis via a remote service since 2001, such service initially being called "Connected" and now referred to as Iron Mountain." Facts that could be alleged based upon this document is that (for instance) are the digital services and software that Digital Iron Mountain currently offers. This FACT would be fully supported by the document, since the document summarizes the test environment and results of the performance testing.

Also, the declaration states that "the company additional utilizes and has utilized at least throughout 2002 an in-house electronic information backup procedure." This is just merely a statement and there is no evidence submitted which proves that the statement is a fact.

This evidence, however, by itself, fails to support the conclusion alleged in the Applicants' declarations that the claimed invention was reduced to practice prior to 2001.

As such, the Applicants have failed to meet their burden under 37 C.F.R. § 1.131(b).

Nevertheless, in order to advance prosecution of the application, the examiner will proceed to consider the remaining merits of the declaration and supporting evidence that has been submitted.

Conception

7. From MPEP § 715.07 (III):

The affidavit or declaration must state FACTS and produce such documentary evidence and exhibits in support thereof as are available to show conception and completion of invention in this country or in a

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NAFTA or WTO member country (MPEP § 715.07(c)), at least the conception being at a date prior to the effective date of the reference. Where there has not been reduction to practice prior to the date of the reference, the applicant or patent owner must also show diligence in the completion of his or her invention from a time just prior to the date of the reference continuously up to the date of an actual reduction to practice or up to the date of filing his or her application (filing constitutes a constructive reduction to practice, 37 CFR § 1.131). As discussed above, 37 CFR § 1.131(b) provides three ways in which an applicant can establish prior invention of the claimed subject matter. The showing of facts must be sufficient to show:

- (A) reduction to practice of the invention prior to the effective date of the reference; or
- (B) conception of the invention prior to the effective date of the reference coupled with due diligence from prior to the reference date to a subsequent (actual) reduction to practice; or
- (C) conception of the invention prior to the effective date of the reference coupled with due diligence from prior to the reference date to the filing date of the application (constructive reduction to practice).

Conception is the mental part of the inventive act, but it must be capable of proof, as by drawings, complete disclosure to another person, etc. In *Mergenthaler v. Scudder*, 1897 C.D. 724, 81 O.G. 1417 (D.C. Cir. 1897), it was established that conception is more than a mere vague idea of how to solve a problem; the means themselves and their interaction must be comprehended also.

8. From MPEP § 2138.04[R-1]:

Conception has been defined as "the complete performance of the mental part of the inventive act" and it is "the formation in the mind of the inventor of a definite and permanent idea of the complete and operative invention as it is thereafter to be applied in practice...." *Townsend v. Smith*, 36 F.2d 292, 295, 4 USPQ 269, 271 (CCPA 1930). "[C]onception is established when the invention is made sufficiently clear to enable one skilled in the art to reduce it to practice without the exercise of extensive experimentation or the exercise of inventive skill." *Hiatt v. Ziegler*, 179

USPQ 757, 763 (Bd. Pat. Inter.1973). Conception has also been defined as a disclosure of an invention which enables one skilled in the art to reduce the invention to a practical form without "exercise of the inventive faculty." *Gunter v. Stream*, 573 F.2d 77, 197 USPQ 482 (CCPA 1978). See also *Coleman v. Dines*, 754 F.2d 353, 224 USPQ 857 (Fed. Cir. 1985) (It is settled that in establishing conception a party must show possession of every feature recited in the count, and that every limitation of the count must have been known to the inventor at the time of the alleged conception. Conception must be proved by corroborating evidence.)

9. Exhibits 3, 5-16 allege to display the conception of the claimed invention before 2002. However, it is unclear how the exhibits translate to describe every limitation of the claims.

Diligence

10. From MPEP § 715.07(a):

Where conception occurs prior to the date of the reference, but reduction to practice is afterward, it is not enough merely to allege that applicant or patent owner had been diligent. *Ex parte Hunter*, 1889 C.D. 218, 49 O.G. 733 (Comm'r Pat. 1889). Rather, applicant must show evidence of facts establishing diligence.

What is meant by diligence is brought out in *Christie v. Seybold*, 1893 C.D. 515, 64 O.G. 1650 (6th Cir. 1893). In patent law, an inventor is either diligent at a given time or he is not diligent; there are no degrees of diligence. An applicant may be diligent within the meaning of the patent law when he or she is doing nothing, if his or her lack of activity is excused. Note, however, that the record must set forth an explanation or excuse for the inactivity; the USPTO or courts will not speculate on possible explanations for delay or inactivity. See *In re Nelson*, 420 F.2d 1079, 164 USPQ 458 (CCPA 1970). Diligence must be judged on the basis of the particular facts in each case. See MPEP § 2138.06 for a detailed discussion of the diligence requirement for proving prior invention.

Under 37 CFR 1.131, the critical period in which diligence must be shown begins just prior to the effective date of the reference or activity and ends with the date of a reduction to practice, either actual or constructive (i.e.,

filing a United States patent application). Note, therefore, that only diligence before reduction to practice is a material consideration. The "lapse of time between the completion or reduction to practice of an invention and the filing of an application thereon" is not relevant to an affidavit or declaration under 37 CFR 1.131. See *Ex parte Merz*, 75 USPQ 296 (Bd. App. 1947).

11. As stated above, since the Applicant alleges an actual reduction to practice prior to the date of the applied reference, diligence is not at issue.

Reduction to Practice

12. Regarding reduction to practice, MPEP § 715.07 states:

In general, proof of actual reduction to practice requires a showing that the apparatus actually existed and worked for its intended purpose.

13. From MPEP § 2138.05:

Reduction to practice may be an actual reduction or a constructive reduction to practice which occurs when a patent application on the claimed invention is filed. The filing of a patent application serves as conception and constructive reduction to practice of the subject matter described in the application. Thus the inventor need not provide evidence of either conception or actual reduction to practice when relying on the content of the patent application. *Hyatt v. Boone*, 146 F.3d 1348, 1352, 47 USPQ2d 1128, 1130 (Fed. Cir. 1998).

When a party to an interference seeks the benefit of an earlier-filed U.S. patent application, the earlier application must meet the requirements of 35 U.S.C. § 120 and 35 U.S.C. § 112, first paragraph for the subject matter of the count. The earlier application must meet the enablement requirement and must contain a written description of the subject matter of the interference count. *Hyatt v. Boone*, 146 F.3d 1348, 1352, 47 USPQ2d 1128, 1130 (Fed. Cir. 1998). Proof of a constructive reduction to practice requires sufficient disclosure under the "how to use" and "how to make" requirements of 35 U.S.C. § 112, first paragraph. *Kawai v. Metlesics*, 480

F.2d 880, 886, 178 USPQ 158, 163 (CCPA 1973) (A constructive reduction to practice is not proven unless the specification discloses a practical utility where one would not be obvious. Prior art which disclosed an anticonvulsant compound which differed from the claimed compound only in the absence of a -CH₂- group connecting two functional groups was not sufficient to establish utility of the claimed compound because the compounds were not so closely related that they could be presumed to have the same utility.). The purpose of the written description requirement is "to ensure that the inventor had possession, as of the filing date of the application relied on, of the specific subject matter later claimed by him." *In re Edwards*, 568 F.2d 1349, 1351-52, 196 USPQ 465, 467 (CCPA 1978). The written description must include all of the limitations of the interference count, or the applicant must show that any absent text is necessarily comprehended in the description provided and would have been so understood at the time the patent application was filed. Furthermore, the written description must be sufficient, when the entire specification is considered, such that the "necessary and only reasonable construction" that would be given it by a person skilled in the art is one that clearly supports each positive limitation in the count. *Hyatt v. Boone*, 146 F.3d at 1354-55, 47 USPQ2d at 1130-1132 (Fed. Cir. 1998) (The claim could be read as describing subject matter other than that of the count and thus did not establish that the applicant was in possession of the invention of the count.). See also *Bigham v. Godtfredsen*, 857 F.2d 1415, 1417, 8 USPQ2d 1266, 1268 (Fed. Cir. 1988) ("[t]he generic term halogen comprehends a limited number of species, and ordinarily constitutes a sufficient written description of the common halogen species, except where the halogen species are patentably distinct).

"In an interference proceeding, a party seeking to establish an actual reduction to practice must satisfy a two-prong test: (1) the party constructed an embodiment or performed a process that met every element of the interference count, and (2) the embodiment or process operated for its intended purpose." *Eaton v. Evans*, 204 F.3d 1094, 1097, 53 USPQ2d 1696, 1698 (Fed. Cir. 2000).

The same evidence sufficient for a constructive reduction to practice may be insufficient to establish an actual reduction to practice, which requires a showing of the invention in a physical or tangible form that shows every

element of the count. *Wetmore v. Quick*, 536 F.2d 937, 942, 190 USPQ 223, 227 (CCPA 1976). For an actual reduction to practice, the invention must have been sufficiently tested to demonstrate that it will work for its intended purpose, but it need not be in a commercially satisfactory stage of development.

If a device is so simple, and its purpose and efficacy so obvious, construction alone is sufficient to demonstrate workability. *King Instrument Corp. v. Otari Corp.*, 767 F.2d 853, 860, 226 USPQ 402, 407 (Fed. Cir. 1985).

For additional cases pertaining to the requirements necessary to establish actual reduction to practice see *DSL Dynamic Sciences, Ltd. v. Union Switch & Signal, Inc.*, 928 F.2d 1122, 1126, 18 USPQ2d 1152, 1155 (Fed. Cir. 1991) ("events occurring after an alleged actual reduction to practice can call into question whether reduction to practice has in fact occurred"); *Corona v. Dovan*, 273 U.S. 692, 1928 C.D. 252 (1928) ("A process is reduced to practice when it is successfully performed. A machine is reduced to practice when it is assembled, adjusted and used. A manufacture [i.e., article of manufacture] is reduced to practice when it is completely manufactured. A composition of matter is reduced to practice when it is completely composed." 1928 C.D. at 262-263 (emphasis added).); *Fitzgerald v. Arbib*, 268 F.2d 763, 765-66, 122 USPQ 530, 531-32 (CCPA 1959) ("the reduction to practice of a three-dimensional design invention requires the production of an article embodying that design" in "other than a mere drawing").

"The nature of testing which is required to establish a reduction to practice depends on the particular facts of each case, especially the nature of the invention." *Gellert v. Wanberg*, 495 F.2d 779, 783, 181 USPQ 648, 652 (CCPA 1974) ("an invention may be tested sufficiently ... where less than all of the conditions of actual use are duplicated by the tests"); *Wells v. Fremont*, 177 USPQ 22, 24-5 (Bd. Pat. Inter. 1972) ("even where tests are conducted under bench' or laboratory conditions, those conditions must fully duplicate each and every condition of actual use' or if they do not, then the evidence must establish a relationship between the subject matter, the test condition and the intended functional setting of the invention," but it is not required that all the conditions of all actual uses be duplicated, such as rain, snow, mud, dust and submersion in water).

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14. In this case, an actual reduction to practice is alleged to have occurred prior to 27 August 2002. However, actual reduction to practice is not fully supported by the documents submitted as evidence.

The Applicants have failed to resolve (at least) the following issues which call into question the actual reduction to practice as alleged in the Applicants' declaration:

*Whether all of the claim limitations were represented in the in-house electronic backup procedure.

*Whether "Connected" contained all of the features claimed in the present invention.

16. For the reasons cited above, the declarations filed by the Applicants under 37 C.F.R. § 1.131 fail to establish that the claimed invention was reduced to practice prior to the critical period, and also fails to establish that the claimed invention was conceived prior to the critical period and diligently reduced to practice thereafter. As such, the affidavit is insufficient to establish invention prior to the prior art references relied upon in the rejections of record. The rejections are maintained by the examiner.

Drawings

5. The objections to the drawings are withdrawn as necessitated by the amendment.

Claim Objections

6. The objections to the claims are withdrawn as necessitated by the amendment.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No 7,085,755 to Bluhm et al (hereafter Bluhm) in view of US PGPub 2005/0086238 to Nevin, III (hereafter Nevin).

Referring to claim 1, Bluhm discloses a method for evaluating the text content of a document database with respect to a document population (see abstract), comprising the steps of:

(a) providing a computer system having a user interface with a display (see column 29, lines 25-36;

(b) gathering documents from said database into said system (see column 6, lines 33-47);

(c) normalizing said gathered documents (see column 22, lines 40-44);

(d) fingerprinting said gathered documents (see column 26, line 8 – column 27, line 14);

(e) determining a text criteria with respect to said document population (see column 6, lines 33-47).

However, while Bluhm discloses the method including the limitations of (a)-(e), Bluhm fails to explicitly teach the further limitations of (f)-(k).

Nevin discloses a method of displaying and storing data in linked nodes (see abstract), including the further limitations of:

(f) forming a net comprising at least two nodes associated by at least one interaction and displayable at said display as two or more spaced apart nodes connected by an interaction (see Fig 1);

(g) loading said text criteria into at least one of said nodes (see [0081] – data is stored in the nodes);

(h) for each document of said database, calculating its geometric relative distance from a said node to derive one or more node attractors (see [0031] and [0185] – the connection strength of the link from one node to another is considered to represent the *relative distance*);

(i) displaying said net at said display in combination with one or more document symbols each representing a said document located in correspondence with said calculated relative distance (see [0033]; [0084]; and Fig 2);

(j) visually examining the display of said net and document symbols (see [0084], lines 14-17); and

(k) determining from said document symbol locations at said display those documents, if any, which are more likely to correspond with said text criteria (see [0313] and [0315] – the user determines which categories are considered to be good or bad).

It would have been obvious to one of ordinary skill at the time the invention was made to utilize Nevin's method for displaying documents to a user in the form of nodes to display the documents of Bluhm, which have been gathered, normalized, fingerprinted and categorized. One would have been motivated to do so to provide a more accurate method displaying search results.

Referring to claim 2, the combination of Bluhm and Nevin (hereafter Bluhm/Nevin) discloses the method of claim 1 in which:

said step (f) forming a net provides for the display of said net as having said nodes defined as circles and said interaction defined as a line extending between said circles (Nevin: see Fig. 8 – examples of the nodes include Painting_Techniques, Eggs, Art_Practice, Renaissance-Paintings and Religious_Images).

Referring to claim 3, Bluhm/Nevin discloses the method of claim 1 in which:

said step (g) loads said text criteria into a positive designated one of said nodes (Nevin: see [0031] and [0083], lines 4-14 – data is stored in the nodes; a node can have a positive position).

Referring to claim 4, Bluhm/Nevin discloses the method of claim 1 in which:

said step (f) forms said net as comprising a said positive designated node and a null designated node connected by a said interaction (Nevin: see [0083]; [0084], lines 4-

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14; [0123] – the last node is used as the null node; the nodes are connected by lines to demonstrate an interaction).

Referring to claim 5, Bluhm/Nevin discloses the method of claim 1 in which:
said step (e) determines said text criteria as criteria document textual material
(Bluhm: see column 6, lines 33-47); and

said step (g) comprises the steps:

(g1) normalizing said criteria document textual material (Bluhm: see column 22, lines 40-44); and

(g2) fingerprinting the normalized criteria document textual material
(Bluhm: see column 26, line 8 – column 27, line 14).

Referring to claim 6, Bluhm/Nevin discloses the method of claim 1 in which:
said step (e) determines a positive text criteria and a negative text criteria with respect to said document population (Nevin: see [0084], lines 4-14);

said step (f) forms a net comprising one or more positive designated nodes, one or more negative designated nodes and one or more interactions (Nevin: see [0084], lines 4-14);

said step (g) loads said positive text criteria into said one or more positive designated nodes, and said negative text criteria into said one or more negative designated nodes (Nevin: see [0031] – the data is stored in the nodes); and

said step (h) calculates, for each document of said database its geometric relative distance from both said positive designated node and said negative designated

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node (Nevin: see [0031] and [0185] – the connection strength of the link from one node to another is considered to represent the *relative distance*).

Referring to claim 7, Bluhm/Nevin discloses the method of claim 1 in which:

said step (i) displays said one or more document symbols as squares (Nevin: see Fig 8 – examples of the documents include Glazing_Techniques, Acrylics, Frescoes, Secular_Images, Food and Oils).

Referring to claim 8, Bluhm/Nevin discloses the method of claim 1 including the steps:

(l) retrieving the identification of those documents resulting from the determination of step (k) (Nevin: see [0313] and [0315]);

(m) viewing one or more of the documents identified in step (l) and determining the quality of the match thereof with said step (e) text criteria (Nevin: see [0313] and [0315]).

Referring to claim 9, Bluhm/Nevin discloses the method of claim 8 further comprising the steps:

(n) identifying a new text criteria as a result of a said step (m) determination of an insufficient said quality of said match (Nevin: see [0313] and [0315]);

(o) adding the identified new text criteria to the step (g) text criteria loaded into said positive designated one of said nodes (Nevin: see [0313] and [0315]); and

(p) reiterating said steps (h) through (m) (Nevin: see [0313] and [0315]).

Referring to claim 10, Bluhm/Nevin discloses the method of claim 8 further comprising the steps:

(q) subsequent to said step (m), identifying and viewing at said display a list of features common to those documents the identification of which was retrieved in step (l) (Nevin: see [0313]-[0316]);

(r) identifying a new text criteria in correspondence with said step (q) identification and viewing at said display of said features common to those documents the identification of which was retrieved in step (l) (Nevin: see [0313]-[0316]);

(s) adding the identified new text criteria to the step (q) text criteria loaded into said positive designated one of said nodes (Nevin: see [0313]-[0316]); and

(t) reiterating said steps (h) through step (m) (Nevin: see [0313]-[0316]).

Referring to claim 11, Bluhm/Nevin discloses the method of claim 1 in which:

said step (k) further comprises the steps:

(k1) determining additional text criteria where said document symbol locations are not likely to correspond with said text criteria determined at step (e) (Nevin: see [0313]-[0316]); and

(k2) adding said additional text criteria to said text criteria determined at said step (e) (Nevin: see [0313]-[0316]).

Referring to claim 12, hereafter Bluhm/Nevin discloses the method of claim 8 in which:

said step (l) is carried out by drawing at said display of said net a boundary defining a region of said symbols (Nevin: see [0320] – the boundary region is determined by the available screen space).

Referring to claim 13, Bluhm discloses a method for evaluating the text content of a document database with respect to a population of documents (see abstract) comprising the steps of:

(a) providing a computer system having a user interface with a display (see column 29, lines 25-36);

(f) selecting a said document attribute to be correlated and the criteria for establishing an attribute value match (see column 6, lines 33-47);

(g) determining the presence of one or more document attribute value match pairs as correlations between said first and second regions (see column 6, lines 33-47).

However, while Bluhm discloses the method including the limitations (a), (f) and (g), Bluhm fails to explicitly teach the further limitations of (b)-(e) and (h).

Nevin discloses a method of displaying and storing data in linked nodes (see abstract), including the further limitations of:

(b) forming one or more nets each comprising at least two nodes associated by at least one interaction (see Fig 1), one or more said nodes representing an evaluation criteria (see [0081] – the data is stored in the nodes), said one or more nets being viewable at said display (see Fig 1);

(c) treating said documents to have an attribute value and calculating for each document a geometric relative distance with respect to a said node criteria and displaying corresponding document symbols at said display (see [0031] and [0185] – the connection strength of the link from one node to another is considered to represent the *relative distance*);

(d) delimiting at said display a first region of said document symbols (see [0031] and Fig 1 – linking the nodes together is considered to represent *delimiting*; the connection of Node 1 to Node 2 is considered to represent a first region);

(e) delimiting at said display a second region of said document symbols (see [0031] and Fig 1 – linking the nodes together is considered to represent *delimiting*; the connection of Node 2 to Node 3 is considered to represent a second region);

(h) displaying said correlations at said display (see [0033] – the display of nodes based on a location calculated from force parameters is considered to represent *displaying correlations*).

It would have been obvious to one of ordinary skill at the time the invention was made to utilize Nevin's method for displaying documents to a user in the form of nodes to display the gathered documents of Bluhm. One would have been motivated to do so to provide a more accurate method displaying search results.

Referring to claim 14, Bluhm/Nevin discloses the method of claim 13 in which: said step (d) provides a said first region extending over more than one said net (Nevin: see [0031] and Fig 1); and includes the step:

(d1) mapping said first region to a first document set by selecting the union or intersection of documents on different nets (Nevin: see [0031] and Fig 1).

Referring to claim 15, Bluhm/Nevin discloses the method of claim 13 in which:

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said step (e) provides a said second region extending over more than one said net (Nevin: see [0031] and Fig 1); and

including the step:

(e1) mapping said second region to a second document set by selecting the union or intersection of documents on different nets (Nevin: see [0031] and Fig 1).

Referring to claim 16, Bluhm/Nevin discloses the method of claim 13 in which: said step (f) selects said criteria for establishing an attribute value match by defining an attribute value tolerance (Bluhm: see column 6, lines 33-47).

Referring to claim 17, Bluhm/Nevin discloses the method of claim 16 in which: said step (g) determines the presence of a document attribute match pair by determining whether the attribute value of a document in said first region is equal to the attribute value of a document in said second region within said attribute value tolerance (Bluhm: see column 6, lines 33-47).

Referring to claim 18, Bluhm/Nevin discloses the method of claim 13 in which: said step (d) is carried out by providing a computer generated line or lines visible at said display (Nevin: see [0083]).

Referring to claim 19, Bluhm/Nevin discloses the method of claim 13 in which: said step (e) is carried out by providing a computer generated line or lines visible at said display (Nevin: see [0083]).

Referring to claim 20, Bluhm/Nevin discloses the method of claim 13 in which:

said step (h) is carried out by providing visible line at said display connecting two said symbols and representing said correlation (Nevin: see [0083]).

Referring to claim 21, Bluhm/Nevin discloses the method of claim 13 in which:

said step (f) selects said document attribute or document identification see (Nevin: [0093], lines 4-7); and

said step (g) identifies the same document in each said first and second region as a said correlation (Nevin: see [0094]).

9. Claims 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over US PGPub 2004/0078366 to Crooks et al (hereafter Crooks et al) in view of US PGPub 2005/0086238 to Nevin, III.

Referring to claim 22, Crooks et al discloses

(a) providing a computer system having a user interface with a display (see [0020]);

(b) identifying the population of documents to be searched (see [0022] – searching the database);

(c) normalizing the documents of the identified population (see [0023], lines 7-9 – normalizing the documents located in the database) with the steps comprising;

(c1) selecting character sequences that will separate words (see [0024], lines 65-70),

(c2) determining to either retain or eliminate punctuation characters (see [0024], lines 28-67),

(c3) setting regular expressions that will characterize numbers (see [0024], lines 1-28),

(c4) setting case behavior (see [0023], lines 2-10),

(c5) setting an offset and factor for numeric class (see [0024], lines 1-28),

(c6) converting a document of said identified population to a character (see [0023], lines 17-18) sequence,

(c7) accessing the words, or punctuation characters, W of said character sequences (see [0024], lines 1-28),

(c8) for each accessed W which is a number, converting such number into a sequence of word numbers, WN, and normalizing said word numbers for fingerprinting (see [0024], lines 1-28),

(c9) marking the position and length of each W or normalized word number WN (see [0026], lines 31 seq.),

(c10) for each W or normalized WN, completing said normalization by reiterating steps (c8) and (c9) (see [0026], lines 10-12 – refining is considered to represent repeating);

(d) fingerprinting said normalized documents (see [0024]-[0026]).

However, while Crooks et al disclose the method including limitations (a)-(c10), Crooks et al fail to explicitly teach the further limitations of (e)-(g).

Nevin discloses a method of displaying and storing data linked by nodes (see abstract), including the further limitations of:

(e) forming one or more nets, each comprising at least two nodes, one or more said nodes representing an evaluation criteria, said one or more nets exhibiting two or more spaced apart nodes connected by one or more interactions (see Fig 1);

(f) for each normalized document, calculating its geometric relative distance from a said node (see [0031] and [0185] – the connection strength of the link from one node to another is considered to represent the *relative distance*);

(g) displaying said one or more nets at said display in combination with one or more document symbols representing a said document located in correspondence with said calculated relative distance (see [0033]; [0084]; and Fig 2); and

determining from said document symbol locations at said display, if any, those documents which are more likely to correspond with said evaluation criteria (see [0313] and [0315] – the user determines which categories are considered to be bad or good).

It would have been obvious to one of ordinary skill at the time the invention was made to utilize Nevin's method for displaying documents to a user in the form of nodes to display the normalized documents of Crooks et al. One would have been motivated to do so to provide a better method for interfacing with in a manner that is user friendly for a physician (Crooks et al: see [0005]).

Referring to claim 23, the combination of Crooks et al and Nevin (hereafter Crooks/Nevin) discloses the method of claim 22 in which said step (c8) further comprises the steps:

(c81) convert any date characterized word number WN to a float or integer (Crooks et al: see [0030]-[0032]),

(c8.2) applying an offset and factor to the word number WN to derive X (Crooks et al: see [0030]-[0032]),

(c8.3) set the range, R (Crooks et al: see [0030]-[0032]),

(c8.4) calculate the quantity $T = (\log_{10} X) / R$ (Crooks et al: see [0030]-[0032]),

(c8.5) successively decrementing the value of range, R and calculating the quantity, T until R is equal to zero (Crooks et al: see [0030]-[0032]),

(c8.6) designating S as the position of a significant numeral in X (Crooks et al: see [0030]-[0032]),

(c8.7) assigning each successive quantity T to a corresponding successive position S to derive the first component of normalized word number WN (Crooks et al: see [0030]-[0032]); and

(c8.8) subsequent to said step (c8.7), assigning each successive said numeral in X to a corresponding successive position S to derive a second component of said normalized word number, WN (Crooks et al: see [0030]-[0032]).

Referring to claim 24, Crooks/Nevin discloses method of claim 23 in which:

said step (c8.3) further comprises the step: (c8.3.1) setting the precision P of the normalized word number WN, said step (c8.8) is carried out until the number of said successive positions S deriving said second component equals the value of said precision, R (Crooks et al: see [0030]-[0032]).

Response to Arguments

10. Applicant's arguments filed regarding the 1.131 and 1.132 Affidavits have been fully considered but they are not persuasive for the reasons mentioned above.

11. In response to applicant's argument on page 16 that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a searching method for iteratively developing search questions and rules) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

12. Arguments regarding claim 1

Applicant's arguments with respect to claim 1, sections a-e have been considered but are moot in view of the new ground(s) of rejection.

In the applicants' remarks on pages 17-18 regarding limitation f, applicant recites "By contrast, the two or more spaced apart nodes of the instant invention are connected by an interaction which is quite different from the noted relationship. As noted in the declaration, this relational association of nodes has been in the art for decades and is well understood. Such a relation provides information about a database but does not address the subject of searching it."

13. Since the relational association of nodes has been in the art for decades, it is not unreasonable for one of ordinary skill in the art to interpret the relationship disclosed by Nevin as an interaction between nodes. Also, in response to applicant's argument on page 16 that the references fail to show certain features of applicant's invention, it is

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noted that the features upon which applicant relies (i.e., Such a relation provides information about a database but does not address the subject of searching it) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to applicant's argument that the references fail to show certain features of applicant's invention for limitation (g), it is noted that the features upon which applicant relies (i.e., text search criteria) are not recited in the rejected claim(s).

Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Regarding the argument towards limitation (h), the nodes are considered to represent the documents and therefore the links are considered to represent the geometric distance.

Regarding (j), the applicant argues that there are no documents in Nevin. The examiner disagrees. Nevin states in [0018], that "nodes contain anything such as documents."

Regarding (k), the examiner believes that determining which documents are good or bad is relative to determining which documents correspond to the text criteria.

14. The examiner considers the prior art to be relevant to claims 3 and 4, for the reasons explained in claim 1.

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15. Applicant's arguments with respect to claim 5 have been considered but are moot in view of the new ground(s) of rejection.

16. Applicant's arguments with respect to claim 6 have been considered but are moot in view of the new ground(s) of rejection.

17. The examiner considers the prior art to be relevant to claims 7-12, for the reasons explained in claim 1.

18. Applicant's arguments with respect to claim 13 have been considered but are moot in view of the new ground(s) of rejection.

19. The examiner considers the prior art to be relevant to claims 14-21 , for the reasons explained in claim 1.

20. Applicant's arguments with respect to claims 22-24 have been considered but are moot in view of the new ground(s) of rejection.

21. On page 29, in regards to the pertinent prior art which was cited but not utilize in the rejection of the claims, the applicant recites "Apparently, the examiner has recognized that these references taken singly or in combination, fail to militate against patentability of the present invention." However, the purpose of mentioning pertinent prior art is to state that the examiner considers the art to be of relevance even though it was not utilized in the writing of the rejection.

Contact Information


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimberly Lovel whose telephone number is (571) 272-2750. The examiner can normally be reached on 8:00 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cottingham can be reached on (571) 272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kimberly Lovel
Examiner
Art Unit 2167

11 November 2006
kml


Primary Examiner
Art Unit 2167